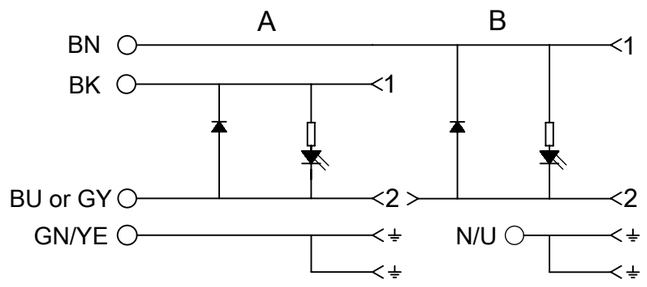
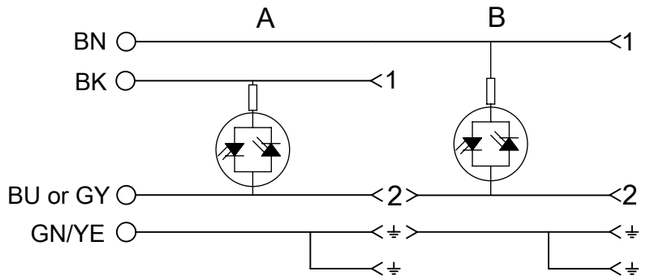
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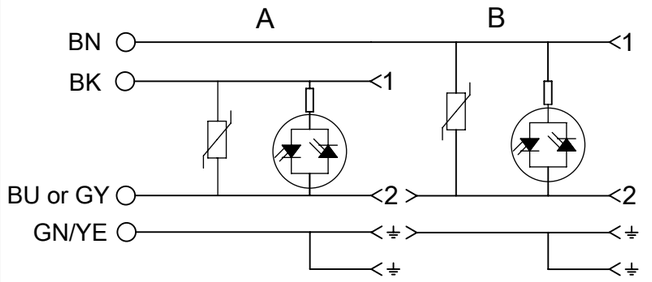
ELECTRICAL DIAGRAM - C3



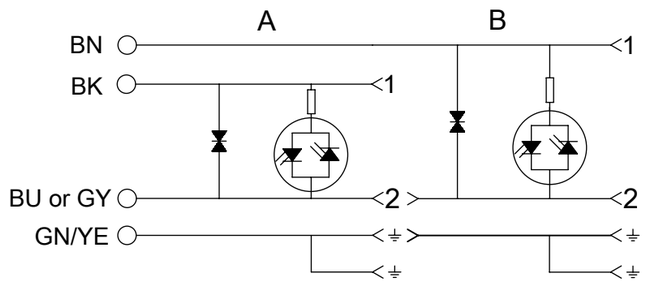
ELECTRICAL DIAGRAM - A1



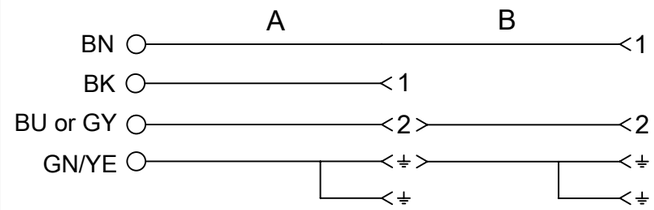
ELECTRICAL DIAGRAM - C4



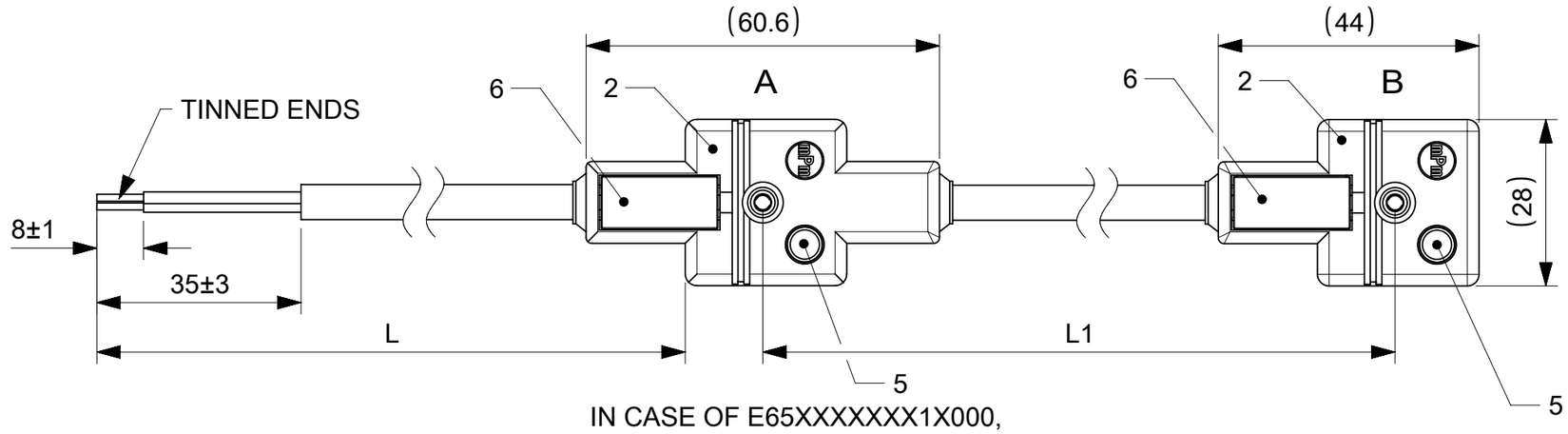
ELECTRICAL DIAGRAM - S0



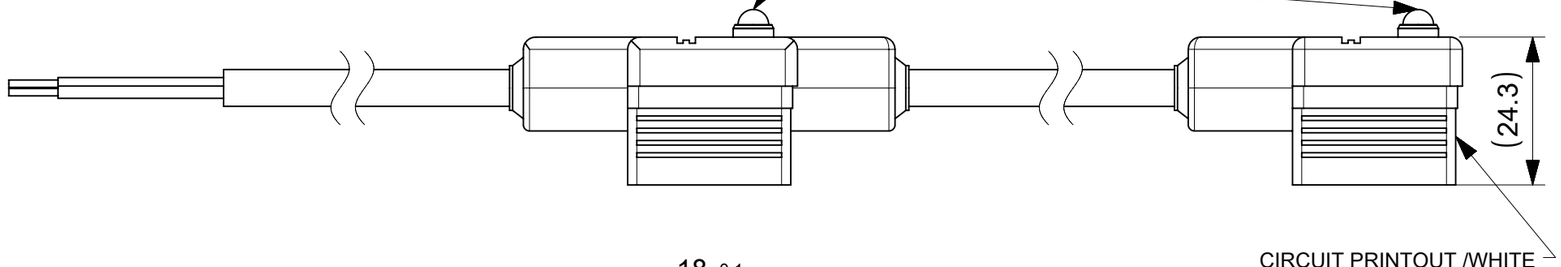
ELECTRICAL DIAGRAM - 00



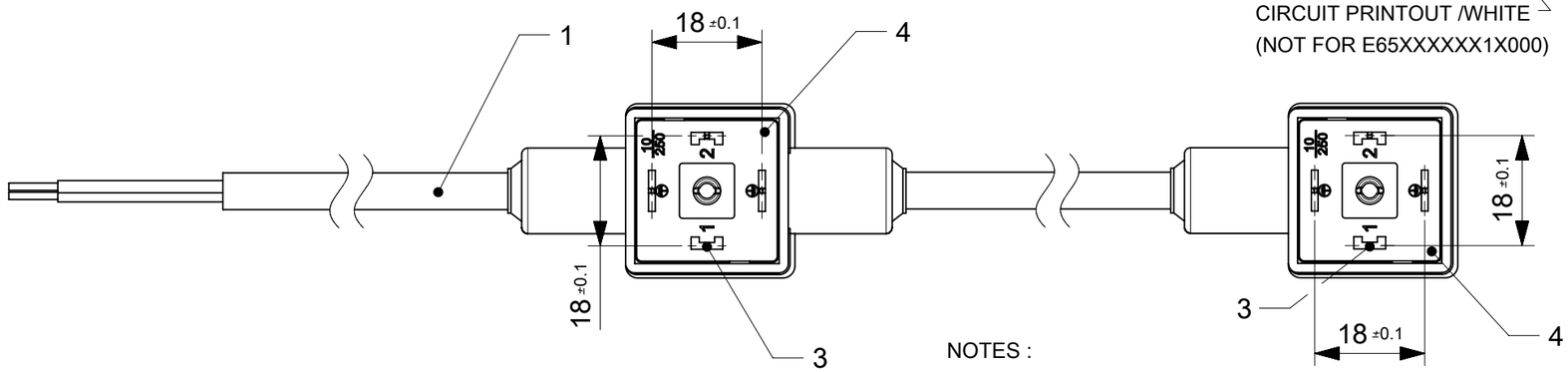
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IN CASE OF E65XXXXXXX1X000,
WITHOUT LED



CIRCUIT PRINTOUT /WHITE
(NOT FOR E65XXXXXX1X000)



NOTES :

ELECTRICAL - CURRENT : MAX. 5.0A
CONTACT RESISTANCE : ≤15 milliohms MAX.
INSULATION RESISTANCE : 100 Megaohms MIN.
PHYSICAL - OPERATING TEMPERATURE WITH :
NITRILE RUBBER (NBR) GASKET : -40°C TO +90°C
LIVE CONTACT DISTANCE :
FORM A - 18.00mm
ENVIRONMENTAL - IP65 SEALING PROTECTION(FIXING SCREW)

BILL OF MATERIALS

ITEM	QTY.	DESCRIPTION	MATERIAL	FINISH
12	0/2	INTEGRATED GASKET	NBR	-
11	0/2	WASHER	NBR	-
10	0/2	SCREW M3x27	STEEL	ZINC
9	0/2	FLAT GASKET	NBR/SILICONE	-
8	0/2	PROFILE GASKET	NBR/SILICONE	-
7	0/2	SCREW M3x25	STEEL	ZINC
6	2	LABEL WHITE	ABS	-
5	0/2	PCB	-	-
4	2	INSERT DIN A	PA66+25%G V0	-
3	8	CONTACT DIN	BRASS	SILVER
2	-	MOULDING MATERIAL	PP	-
1	-	CABLE (SEE SHEET 3)	-	-

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DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	1.0 °
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	0.05
1 PLACE	±	0.3
0 PLACES	±	0.5

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: REMOVED OBSOLETED PART NUMBERS AS PER PCN#515183

EC NO: 826032
DRWN: SAMPRS 2025/06/11
CHK'D: GGA 2025/06/30
APPR: GGA 2025/06/30

INITIAL REVISION:
DRWN: SSM 2020/07/31
APPR: RSILLER 2020/09/04

molex

STANDARD E653 DIN FORM A

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1210550038	PSD	000	A2

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	121055	SEE SHEET 4	GENERAL MARKET	1 OF 4

FORMAT: master-lb-prod-A3
REVISION: J1
DATE: 2021/05/01

ENGINEERING No. MATRIX

E	6	5	3	X	X	X	X	X	X	1	X	X	X	X

E - Packing without bag
W - Single Packing
Q - Quick Packing

Number of Wires
2 - 2 Poles
3 - 2 Poles + Ground
A - M12 STR , B - 90°

Cable type:
See Table

Head Colour:
G - Grey
N - Black
A - CSA-UL Black
B - CSA-UL Grey

Cable Lenght
in Meters (L):
A=1
B=1.5
C=2
D=2.5
E=3
F=3.5
G=4
H=4.5
L=5
M=5.5
N=6
P=6.5
Q=7
R=7.5
S=8
T=8.5
U=9
K=10

Cable Lenght
in cm Between
2 connectors (L1)
15=15 cm
30=30 cm
1K=100 cm
min length=13 cm

Earth PIN Location:
1=6/12 - earth on 6H/12H
2=12/1 earth on 12H
6=6/1 1 earth on 6H

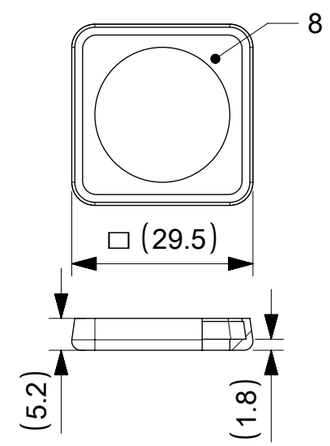
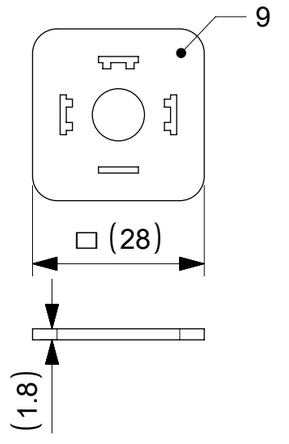
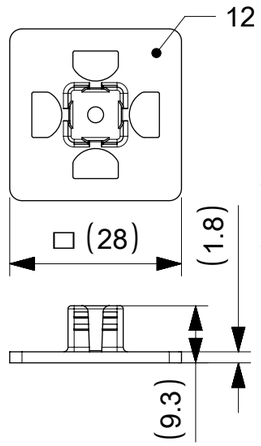
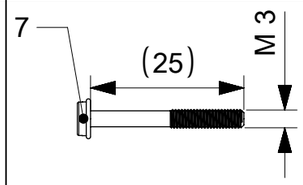
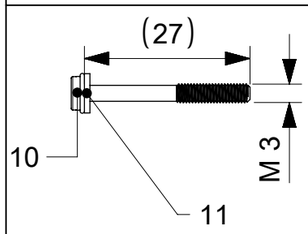
Internal Circuit
see Wiring Configuration

Type of Gasket and Screw:
1 = NBR Profile Gasket + Fixing Screw M3x25mm
2 = NBR Flat Gasket + Fixing Screw M3x25mm
3 = Silicone Profile Gasket + Fixing Screw M3x25mm
4 = Silicone Flat Gasket + Fixing Screw M3x25mm
P = NBR Integrated Gasket + Fixing Screw with Washer M3x27mm Assembled on Connector
R = NBR Integrated Gasket + Fixing Screw with Washer M3x27mm NOT Assembled on Connector
T = NBR Profile Gasket + Fixing Screw with Washer M3x27mm

Voltage and LED color

1= 12V 2= 24V 3= 48V 4= 115V 5= 230V	RED LED
A= 12V B= 24V C= 48V D= 115V E= 230V	GREEN LED
G= 12V H= 24V K= 48V L= 115V M= 230V	YELLOW LED

Type of Screws and Gaskets

Profiled Gasket	Flat Gasket	Integrated Gasket	Screw M3x25
			
			Screw M3x27 + Washer
			

DOCUMENT STATUS	P1	RELEASE DATE	2025/06/30 17:14:26

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DIMENSION UNITS	SCALE
mm	1:1

GENERAL TOLERANCES (UNLESS SPECIFIED)

ANGULAR TOL	±	1.0 °
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	0.05
1 PLACE	±	0.3
0 PLACES	±	0.5

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

CURRENT REV DESC: REMOVED OBSOLETED PART NUMBERS AS PER PCN#515183

EC NO: 826032
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CHK'D: GGA 2025/06/30
APPR: GGA 2025/06/30

INITIAL REVISION:
DRWN: SSM 2020/07/31
APPR: RSILLER 2020/09/04

THIRD ANGLE PROJECTION	DRAWING	SERIES
	A3-SIZE	121055

molex

STANDARD E653 DIN FORM A

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1210550038	PSD	000	A2

MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
SEE SHEET 4	GENERAL MARKET	2 OF 4

FORMAT: master-tb-prod-A3
REVISION: J1
DATE: 2021/05/01

TABLE 1 - CABLES

mPm	Code	Wires	Cross Section	Material	Colour	Diameter ∅
I	0	3	1 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	6.4±0.2 mm
A	2	2	20 AWG	PVC CSA/UL 2661	Black	5.4±0.2 mm
A	2	3	20 AWG	PVC CSA/UL 2661	Black	5.6±0.2 mm
A	2	4	20 AWG	PVC CSA/UL 2661	Black	6.2±0.25 mm
A	2	5	20 AWG	PVC CSA/UL 2661	Black	7±0.2 mm
B	2	2	20 AWG	PUR CSA/UL 20668	Black	5.6±0.2 mm
B	2	3	20 AWG	PUR CSA/UL 20668	Black	5.6±0.2 mm
B	2	4	20 AWG	PUR CSA/UL 20668	Black	6.2±0.2 mm
B	2	5	20 AWG	PUR CSA/UL 20668	Black	7±0.2 mm
D	2	3	0.5 mm²	PVC TI2 CEI 20-20	Grey	5.5±0.2 mm
F	2	3	0.5 mm²	CNEOMO	Grey RAL7000	5.5±0.2 mm
I	2	2	0.5 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	5.5+0.3/-0 mm
I	2	3	0.5 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	5.5+0.3/-0 mm
I	2	4	0.5 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	6.5±0.2 mm
I	2	5	0.5 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	7±0.2 mm
N	2	2	0.5 mm²	PVCH03	Black	5.2±0.2 mm
N	2	3	0.5 mm²	PVCH03	Black	5.5±0.2 mm
N	2	4	0.5 mm²	PVCH03	Black	6.9 mm max
P	2	2	0.5 mm²	PUR-BLEND	Black	5.5±0.2 mm
P	2	3	0.5 mm²	PUR-BLEND	Black	5.5+0.3/-0 mm
P	2	4	0.5 mm²	PUR-BLEND	Black	6.5±0.2 mm
P	2	5	0.5 mm²	PUR-BLEND	Black	7+0.3/-0.1 mm
A	3	2	18 AWG	PVC CSA/UL 2661	Black	6.5±0.25 mm
A	3	3	18 AWG	PVC CSA/UL 2661	Black	6.5±0.25 mm
A	3	4	18 AWG	PVC CSA/UL 2661	Black	7±0.3 mm
A	3	5	18 AWG	PVC CSA/UL 2661	Black	7.8±0.25 mm
B	3	2	18 AWG	PUR CSA/UL 20668	Black	6.8±0.2 mm
B	3	3	18 AWG	PUR CSA/UL 20668	Black	6.5±0.2 mm
B	3	4	18 AWG	PUR CSA/UL 20668	Black	7±0.2 mm
B	3	5	18 AWG	PUR CSA/UL 20668	Black	7.8±0.2 mm
D	3	3	0.75 mm²	PVC TI2 CEI 20-20	Grey	6.5±0.2 mm
D	3	4	0.75 mm²	PVC TI2 CEI 20-20	Grey	7.1±0.2 mm
I	3	2	0.75 mm²	PVC CEI 2022 II O.R.	Grey RAL7001	5.5±0.2 mm
I	3	3	0.75 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	6±0.2 mm
I	3	4	0.75 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	7±0.2 mm
N	3	2	0.75 mm²	PVCH05	Black	6.2±0.2 mm
N	3	3	0.75 mm²	PVCH05	Black	6.5±0.2 mm
N	3	4	0.75 mm²	PVCH05	Black	7.1±0.2 mm
N	3	5	0.75 mm²	PVCH05	Black	8.0+0.2/-0 mm
P	3	2	0.75 mm²	PUR-BLEND	Black	6.5±0.2 mm

mPm	Code	Wires	Cross Section	Material	Colour	Diameter ∅
P	3	3	0.75 mm²	PUR-BLEND	Black	6.5±0.2 mm
P	3	4	0.75 mm²	PUR-BLEND	Black	7±0.2 mm
R	3	3	0.75 mm²	TPR HAL. FREE	Black	6.5±0.2 mm
T	3	3	0.75 mm²	PUR CSA/UL	Yellow	6.5±0.2 mm
Y	3	3	0.75 mm²	SIL/0300	Red	6.5±0.2 mm
F	4	3	1 mm²	CNEOMO	Grey RAL7000	7.1+0.2/-0 mm
F	4	4	1 mm²	CNEOMO	Grey RAL7000	7.1+0.2/-0 mm
I	4	2	1 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	7.1+0.2/-0 mm
I	4	3	1 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	7.1+0.2/-0 mm
N	4	2	1 mm²	PVCH05	Black	6.5±0.2 mm
N	4	3	1 mm²	PVCH05	Black	6.9±0.2 mm
R	4	3	1 mm²	TPR HAL. FREE	Black	7.1±0.2 mm
N	5	3	1.5 mm²	PVCH05	Black	8.3+0.2/-0 mm
I	6	2	0.35 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	4.8±0.2 mm
A	7	3	20 AWG	PVC CSA/UL 2661	Yellow	5.6±0.2 mm
I	9	4	0.75 mm²	PVC CEI 2022 II O.R.	Grey RAL7035	7.3±0.2 mm

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DIMENSION UNITS	SCALE
mm	1:1

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ANGULAR TOL	±	1.0 °
4 PLACES	±	
3 PLACES	±	
2 PLACES	±	0.05
1 PLACE	±	0.3
0 PLACES	±	0.5

DRAFT WHERE APPLICABLE MUST REMAIN WITHIN DIMENSIONS

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EC NO: 826032
DRWN: SAMPRS 2025/06/11
CHK'D: GGA 2025/06/30
APPR: GGA 2025/06/30

INITIAL REVISION:
DRWN: SSM 2020/07/31
APPR: RSILLER 2020/09/04

molex

STANDARD E653 DIN FORM A

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1210550038	PSD	000	A2

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	121055	SEE SHEET 4	GENERAL MARKET	3 OF 4

DOCUMENT STATUS	P1	RELEASE DATE	2025/06/30 17:14:26

FORMAT: master-tb-prod-A3
REVISION: J1
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PART LIST

SL No.	MOLEX P/N	ENGINEERING No.
1	-	-
2	-	-
3	-	-
4	-	-
5	-	-
6	-	-
7	-	-
8	-	-
9	1210503504	E653B2AL131PC4H
10	-	-
11	1210550038	E653P3NE1311C4H
12	1210550048	E653P3NL2011000
13	1210550055	E653N3NA3011000
14	1210550063	E653I3NE1411C4H
15	1210550065	E653I3NL1411C4H
16	1210550067	E653I3NL1611C4H
17	-	-
18	-	-
19	-	-
20	1210550083	E653N3NC8011000
21	-	-
22	-	-
23	-	-
24	-	-
25	-	-
26	-	-
27	-	-
28	1210550140	E653B3NL1311C4H
29	-	-
30	1210550143	E653P3NL201PS0B
31	-	-
32	1210550148	E653P3NE201PS0B
33	-	-
34	-	-
35	1210550157	E653P3NE2011C4H
36	-	-
37	-	-
38	1210550163	E653P3NE5011C4H
39	-	-
40	-	-

SL No.	MOLEX P/N	ENGINEERING No.
41	1210550169	E653P3NA131PC3H
42	1210550171	E653P3NC131PC3B
43	1210550174	E653P3NL2011C4H
44	1210550175	E653P3NC131P000
45	-	-
46	-	-
47	1210550186	E653P3NC4014C4H
48	-	-
49	-	-
50	1210550255	E653P3NB201PS0H
51	1210550256	E653P3NC151PS0H
52	1210550258	E653P3NA131PC4H
53	-	-
54	-	-
55	-	-
56	-	-
57	-	-
58	1210550277	E653P3NU201PC4H
59	-	-
60	1210550282	E653P3NB131PC31
61	-	-
62	-	-
63	-	-
64	-	-
65	-	-
66	-	-
67	-	-
68	1210550290	E653P3NL201PC4H
69	-	-
70	-	-
71	1210550299	E653N3NA201PA1B
72	1210550311	E653A3AA161PC31
73	1210550312	E653A3AA161PC3A
74	1210550313	E653A3AA161PC3G
75	1210550315	E653P3NE501PC4H
76	-	-
77	-	-
78	1210550322	E653P3NC4014000
79	1210550324	E653P3NK201PS0B
80	-	-

SL No.	MOLEX P/N	ENGINEERING No.
81	1210550337	E653B3AE1411C4H
82	-	-
83	1210550357	E653A3AB1513C4H
84	1210550358	E653P3NG131PC4H

TABLE OF LENGTH TOLERANCES [mm]		
Over	Up to and Including	Tolerance
0	500	-10/+20
500	1000	±20
1000	3000	±30
3000	5000	±40
5000	10000	±50
10000	15000	±100
15000	20000	±150
20000		±L/100

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molex

STANDARD E653 DIN FORM A

PRODUCT CUSTOMER DRAWING

DOCUMENT NUMBER	DOC TYPE	DOC PART	REVISION
1210550038	PSD	000	A2

THIRD ANGLE PROJECTION	DRAWING	SERIES	MATERIAL NUMBER	CUSTOMER	SHEET NUMBER
	A3-SIZE	121055	SEE PART LIST	GENERAL MARKET	4 OF 4

FORMAT: master-lb-prod-A3
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